August 5, 1948.

Dr. R. R. Roepke, Stamford Research Labs., American Cyanamide Company, Stamford, Conn.

Dear Ray,

Thanks for arranging to send me that sample of Phosphine CRN (I Assume that GNR and GRN are synchomous; one was used in the publication; the other was on the bottle and in your letter). As far as we could tell, half a dozen transfers through barely bacteriestatic concentrations had no effect on the lysogenicaty of the Salmonella used. However, I have had to interrupt this work because, quite suddenly and unexpectedly, a new lead case up re the bacterial zygote—quite possibly a mutation in one of our stocks which modifies the life cycle so that the diplophase or heterozygote is somewhat stabilised, as it is in yeast. Until I've learned how to reproduce the phenomenon regularly, I don't dare let it go. But the data so far collected should exclude, once and for all, the transforming substance sort of interpretation for recombination in K-12.

Incidentally, if I haven't mentioned this before, the photonreflectometer was completed according to the design you sent, and is working quite nicely. However, I haven't had time to sit down and fagure out how to calibrate it for the appreciable blank reading (light scattered by water) I suppose, one can just subtract this.

Yours sincerely,

Joshua Lederberg.